

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No: To Be Assigned
Applicant: Nikolaus H. Lehmann et al.
Filed: Herewith
Title: METHODS AND APPARATUS FOR TRANSMITTING AND RECEIVING
RANDOMLY INVERTED WIDEBAND SIGNALS
TC/A.U.: To Be Assigned
Examiner: To Be Assigned
Docket No.: MATI-226us

INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

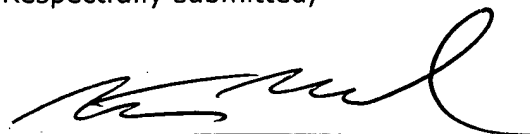
Pursuant to 37 C.F.R. §§ 1.97 and 1.98 and to the duty of disclosure set forth in 37 C.F.R. § 1.56, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO 1449 (RP) submitted herewith. A copy of each of the non-U.S. patents/publications listed as references are also enclosed.

Although the information submitted herewith may be "material" to the Examiner's consideration of the subject application, this submission is not intended to constitute an admission that such information is "prior art" as to the claimed invention.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

This Information Disclosure Statement is being filed concurrently with the above-referenced application.

Respectfully submitted,



Kenneth N. Nigon, Reg. No. 31,549
Stephen J. Weed, Reg. No. 45,202
Attorney(s) for Applicant(s)

SJW/tmb

Enclosures: PTO Form 1449
(3) References

Dated: February 25, 2004

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Valley Forge, PA 19482
(610) 407-0700

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Kathleen Libby

Substitute for Form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	To Be Assigned
Filing Date	Herewith
First Named Inventor	Nikolaus H. Lehmann et al.
Art Unit	To Be Assigned
Examiner Name	To Be Assigned
Attorney Docket No.	MAT1-226US

SHEET 1 of 2

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
	1.	US-6,606,350 B2	08/12/2003	Dress, Jr. et al.	Entire Document
	2.	US-5,901,172	05/04/1999	Fontana et al.	Entire Document
	3.	US-5,523,760	06/04/1996	McEwan	Entire Document
	4.	US-5,345,471	09/06/1994	McEwan	Entire Document
	5.	US-2003/0227984 A1	12/11/2003	Batra et al.	Entire Document
	6.	US-2003/0227961 A1	12/11/2003	Batra et al.	Entire Document
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date (MM-DD-YYYY)	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
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SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

¹Applicant's unique citation designation number (optional).

²See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).

⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

⁶Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Substitute for Form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT***(Use as many sheets as necessary)***Complete if Known**

Application Number	To Be Assigned
Filing Date	Herewith
First Named Inventor	Nikolaus H. Lehmann et al.
Art Unit	To Be Assigned
Examiner Name	To Be Assigned
Attorney Docket No.	MATI-226US

SHEET 2 of 2**NON-PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	7.	MOE Z. WIN ET AL., Ultra-Wide Bandwidth Time-Hopping Spread-Spectrum Impulse Radio for Wireless Multiple-access Communications, IEEE Transactions on Communications, Vol. 48, No. 4, pp. 679-691, April 2000.	<input type="checkbox"/>
	8.	JAC ROMME ET AL., On the Power Spectral Density of Time-Hopping Impulse Radio, IEEE Conference on Ultra Wideband Systems and Technologies, 2002	<input type="checkbox"/>
	9.	MOE Z. WIN, Spectral Density of Random Time-Hopping Spread-Spectrum UWB Signals with Uniform Timing Jitter, Proc. MICOM '99, Vol. 2, pp. 1196-1200, 1999.	<input type="checkbox"/>
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Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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